



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/729,023	12/08/2003	Stefaan Margriet Albert Van Hoogenbemt	Q78535	2706
7590 02/14/2006 SUGHRUE MION, PLLC 2100 Pennsylvania Avenue, N.W. Washington, DC 20037-3213			EXAMINER COLEMAN, ERIC	
			ART UNIT 2183	PAPER NUMBER

DATE MAILED: 02/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/729,023	Applicant(s) VAN HOOGENBEMT ET AL.	
	Examiner Eric Coleman	Art Unit 2183	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Specification

The abstract of the disclosure is objected to because the abstract is not formatted as a single paragraph and it contains "figure 1" at the end of the abstract.

Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Corby (patent No. 5,524,258).

3. Corby taught the invention substantially as claimed including a data processing ("DP") system comprising:

a) Digital signal processor (e.g., see fig. 1 and col. 4, lines 4-52);

b) Unit for processing (30) comprising plurality of inputs (7) (e.g., see fig. 1) to receive input data and a predefined interconnection of plurality of basic operators (33a,33b,35a,35b,35c,35d37a,37b,39) (e.g., see fig. 1 and col. 4, lines 35-49) coupled to the plurality of input data and a plurality of control inputs for execution of a respective basic operation on the received input data [data inputs coupled via mux (8) and control input from the system controller to the DSP array in figure 1 where each DSP receives

Art Unit: 2183

control data via individual control inputs (e.g., see col. 4, lines 4-17) coupled between the predefined plurality of basic operators (DSPs in the array) and program controller (system control computer) (e.g., see fig. 1);

c) The program controller (system control computer) to activate the plurality of control inputs for at least one phase of a control program [the system control processor [the system controller sent the control inputs and therefore activate the control inputs to the array] and under control of an actual phase of the at least one phase [the system was program controlled in systolic manner so the operations were under control of the system timing which comprises phases of a system clock] one or more basic operators of said plurality of basic operators and to enable thereby said one or more basic operators to execute its respective basic operation and to realize therewith at least part of a dedicated operation of said dedicated system (e.g., see col. 5, lines 16-65); and

d) Unit for processing (30) comprises a plurality of outputs to receive upon realization of each phase of the at least one phase of the control program , an output data whereby the output data represent a result of the execution of the at least one dedicated operation of the dedicated system [the output of data packets externally and the output of data packet to the system controller in figure 1].

4. Corby taught the system performed real-time data processing of data samples using digital signal processors (e.g., see col. 2, lines 37-62). Corby did not expressly detail (claims 1,6) the processing unit comprised a arithmetic logic unit. However since Corby taught processing packets communicated between devices and these arithmetic as well as logic functions would have characteristically has had to have been performed

then one of ordinary skill would have been motivated to implement the processing unit of Corby as an arithmetic logic unit.

5. As per claim 2, Corby taught the program controller comprises a start input to control the execution of the control program and a finish output to sign a finishing of the control program and further characterized in that a phase of control program comprises a set of instructions being designed in accordance to a desired at least one dedicated operation (e.g., see col. 5, lines 11-23)[the input for data packet indicates to the processor to start processing when data packets are present and the output of packets in figure 1 to the system control processor that would have sent packet status data to system controller for indicating the finish of the processing of the data] (e.g., see col. 5, lines 51-65).

6. As per claims 3,5 Corby taught the dedicated digital signal processing system is a digital front-end system a digital communication system (e.g., see col. 4, lines 18-48). Therefore it would have been obvious to one of ordinary skill that the use of the teaching of Corby would have been applicable to any digital subscriber line system.

7. As per claim 4, Corby taught the dedicated operation of the dedicated system comprises filter operation (e.g., see col. 5, lines 51-65).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Vorbach (patent No. 6,728,871) disclosed run-time configurable and logic cell (e.g., see abstract).

Art Unit: 2183


Martin (patent No. 5,752,070) disclosed an asynchronous processor (e.g., see abstract).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Coleman whose telephone number is (571) 272-4163. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie Chan can be reached on (571) 272-4162. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EC



ERIC COLEMAN
PRIMARY EXAMINER